

Serial No. 09/910,497
Reply to Office Action of July 10, 2007

Docket No.: 290397.0007
(97541.00007)

Please amend the claims as follows:

1. (currently amended) A ~~diel-based~~, reduced toxicity, ethylene glycol and propylene glycol based, non-aqueous heat transfer fluid, which can be used as an engine coolant in environmental conditions ranging from ambient temperatures of -35° F to +130° F, for use in a heat exchange system without any addition of water, said heat transfer fluid comprising:

(a) ethylene glycol, wherein the ethylene glycol comprises about 70 percent by weight of the total weight of the ethylene glycol and propylene glycol in the heat transfer fluid;

(b) propylene glycol, wherein the propylene glycol comprises about 30 percent ~~acts as an inhibitor for ethylene glycol poisoning when it is mixed with ethylene glycol and wherein the ethylene glycol comprises between greater than 60 percent to about 70 percent by weight of the total weight of the ethylene glycol and the propylene glycol in the heat transfer fluid; and~~

(c) at least one corrosion inhibitor additive that is soluble in ethylene glycol and propylene glycol, wherein the heat transfer fluid contains no additives that require water to be present in the fluid to dissolve the additives or to otherwise enable the additives to function.

2. (original) The heat transfer fluid of claim 1, wherein the corrosion inhibitor additive is selected from the group consisting of a molybdate salt, a nitrate salt and an azole.

3. (previously presented) The heat transfer fluid of claim 1, wherein the ethylene glycol and propylene glycol comprise from about 85 percent by weight to about 99.85 percent by weight of the heat transfer fluid.

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4-5. (cancelled)

6. (original) The heat transfer fluid of claim 1, wherein the corrosion inhibitor is comprised of a molybdate salt in a concentration of between about 0.05 percent to about 5 percent by weight of the total weight of the heat transfer fluid.

7. (original) The heat transfer fluid of claim 1, wherein the corrosion inhibitor is comprised of a nitrate salt in a concentration of between about 0.05 percent to about 5 percent by weight of the total weight of the heat transfer fluid.

8. (original) The heat transfer fluid of claim 1, wherein the corrosion inhibitor is comprised of an azole in a concentration of between about 0.05 percent to about 5 percent by weight of the total weight of the heat transfer fluid.

9. (original) The heat transfer fluid of claim 6, wherein the molybdate salt is sodium molybdate.

10. (original) The heat transfer fluid of claim 7, wherein the nitrate salt is sodium nitrate.

11. (original) The heat transfer fluid of claim 8, wherein the azole is tolyltriazole.

12. (original) The heat transfer fluid of claim 1, wherein the corrosion inhibitor is comprised of at least one of (i) sodium molybdate in a concentration between about 0.05 percent by weight to about 5 percent by weight of the total weight of the heat transfer fluid, (ii) sodium nitrate in a concentration between about 0.05 percent by weight to about 5 percent by weight of the total weight of the heat transfer fluid, and (iii) tolyltriazole in a concentration

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between about 0.05 percent by weight to about 5 percent by weight of the total weight of the heat transfer fluid.

13. (previously presented) A reduced toxicity, ethylene glycol and propylene glycol based, non-aqueous heat transfer fluid, which can be used as an engine coolant in environmental conditions ranging from ambient temperatures of -35° F to +130° F, for use in a heat exchange system without any addition of water and without any additive that requires water in the heat transfer fluid to dissolve the additive or to otherwise enable the additive to function, said heat transfer fluid comprising:

(a) ethylene glycol, wherein the ethylene glycol comprises about 70 percent by weight of the total weight of the ethylene glycol and propylene glycol in the heat transfer fluid;

(b) propylene glycol, wherein the propylene glycol comprises about 30 percent by weight of the total weight of the ethylene glycol and the propylene glycol in the heat transfer fluid;

(c) sodium molybdate, wherein the sodium molybdate comprises about 0.5 percent by weight of the total weight of the heat transfer fluid;

(d) sodium nitrate, wherein the sodium nitrate comprises about 0.5 percent by weight of the total weight of the heat transfer fluid; and

(e) tolyltriazole, wherein the tolyltriazole comprises about 0.5 percent by weight of the total weight of the heat transfer fluid.

14-26. (cancelled)

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27. (currently amended) A method to reduce the toxicity of an ethylene glycol based, non-aqueous heat transfer fluid comprising the steps of:

- (a) providing an ethylene glycol based heat transfer fluid; and
- (b) adding propylene glycol to the heat transfer fluid, wherein the ethylene glycol concentration of the resulting heat transfer fluid is ~~between greater than 60 percent to~~ about 70 percent by weight of the total weight of the ethylene glycol and the propylene glycol in the heat transfer fluid.

28-39. (cancelled)

40. (previously presented) The method of claim 27, further comprising the step of adding to the non-aqueous heat transfer fluid a corrosion inhibitor additive that is soluble in both ethylene glycol and propylene glycol, wherein the heat transfer fluid contains no additives that require water to be present in the fluid to dissolve the additives or to otherwise enable the additives to function.

41. (previously presented) The method of claim 40, wherein the corrosion inhibitor is selected from the group consisting of a molybdate salt, a nitrate salt, and an azole.

42. (previously presented) The method of claim 27, wherein the ethylene glycol and propylene glycol comprise from about 85 percent by weight to about 99.85 percent by weight of the heat transfer fluid.

43. (cancelled)

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44. (previously presented) The method of claim 40, wherein the corrosion inhibitor comprises a molybdate salt in a concentration of between about 0.05 percent to about 5 percent of the weight of the heat transfer fluid.

45. (previously presented) The method of claim 40, wherein the corrosion inhibitor comprises a nitrate salt in a concentration of between about 0.05 percent to about 5 percent of the weight of the heat transfer fluid.

46. (previously presented) The method of claim 40, wherein the corrosion inhibitor comprises an azole in a concentration of between about 0.05 percent to about 5 percent of the weight of the heat transfer fluid.

47. (previously presented) The method of claim 44, wherein the molybdate salt is sodium molybdate.

48. (previously presented) The method of claim 45, wherein the nitrate salt is sodium nitrate.

49. (previously presented) The method of claim 46, wherein the azole is tolyltriazole.

50. (previously presented) The method of claim 40, wherein the corrosion inhibitor comprises at least one of (i) sodium molybdate in a concentration between about 0.05 percent by weight to about 5 percent by weight of the total weight of the heat transfer fluid, (ii) sodium nitrate in a concentration between about 0.05 percent by weight to about 5 percent by weight of the total weight of the heat transfer fluid, and (iii) tolyltriazole in a concentration

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between about 0.05 percent by weight to about 5 percent by weight of the total weight of the
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